ACIDIC PRECIPITATION IN ONTARIO STUDY

ANNUAL STATISTICS OF CONCENTRATION: CUMULATIVE AMBIENT AIR MONITORING NETWORK 1988

JULY 1990

Ontario
Environment
Environnement
Jim Bradley, Minister/ministre

ISSN 0824-880X (mainseries)
ISSN 0830-1638 (subseries)

ACIDIC PRECIPITATION IN ONTARIO STUDY

ANNUAL STATISTICS OF CONCENTRATION:

CUMULATIVE AMBIENT AIR MONITORING NETWORK

1988

Report prepared by:
Atmospheric Research and Special Projects Section
Air Resources Branch
Ontario Ministry of the Environment

ARB-003-90

JULY 1990

PIBS 1059
LOG 90-2207-003

ACKNOWLEDGEMENTS

This report was prepared by Diane Green of the APIOS Atmospheric Deposition and Chemistry Program. However, the data themselves are a product of the combined efforts of many individuals. Precipitation samples were collected by a large number of site operators, whose names cannot be individually mentioned here, under the coordination of the APIOS environmental technicians Scott Kennedy (in the Southwestern Region), Steve Elliott (in Southeastern Region), Wim Smits (in Northwestern Region), Bill Trayling (Northeastern Region), and J.P. Varto (in Central Region). Sample handling was carried out by Sue Lampinen and Gail Fielding. Chemical analyses were performed at the Laboratory Services Branch under the coordination of Frank Tomassini. Invaluable clerical and computer assistance were provided by Peter Maheras, Joseph Lamb and Roberto Banchon. All enquiries regarding the reported data should be directed to Neville Reid, Coordinator, Atmospheric Deposition and Chemistry Program, at (416) 326-1691.

TABLE OF CONTENTS

PART IV SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY REGION

PART I

INTRODUCTION

INTRODUCTION

This report was prepared by Diane Green. The statistical summaries presented in this report pertain to the 1988 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) cumulative ambient air monitoring network. The relevant data can be obtained on request from the Air Resources Branch of the Ontario Ministry of the Environment. Any sample of which sampling period is less that 23 days or greater than 33 days is not included in the statistics calculations. All available data are utilized in the calculations except results reported as being unreliable (i.e., results are identified as unreasonable values by using the validation procedures; detailed description of the validation procedure is available from the Ministry upon request) or approximate (i.e., inexact results are reported due to laboratory difficulties, such as may be encountered in calibration or when the samples cannot be analyzed to confirm the reported values). In a very few cases, concentration levels exceeded the upper limit of the range of the chemical analysis. Rather than using the upper limit, a decision was made to exclude these values from the statistics generated in this report. Results labelled as <W are replaced by "zero". W is the level which the analytical technique cannot distinguish from zero. Prior to 1986, a level was recorded less than one detection limit T, a value corresponding to one half the detection limit was utilized for statistical calculations as reported in the statistical summaries. These values are no longer halved. Note that T is normally about ten times W, and values above the T criteria are considered to be precise and accurate. W corresponds to approximately one standard deviation of low level duplicate of real samples. In the presented statistics summaries, "Total Sulphur" is calculated by the summation of sulphur of Sulphur Dioxide" and "Sulphate".

Beginning in 1985, "Sulphur Dioxide" is corrected by the addition of nylon filter sulfate. In these reports sulphur loading on nylon filters is interpreted as sulphur dioxide. However, it is possible that organic sulphur compounds also contribute to this loading. Methods do not currently exist to quantify this contribution in routine network operation.

The statistical summaries presented in Parts III to IV include number of samples, mean (arithmetic/geometric), standard deviation (arithmetic/geometric), maximum, minimum, quartiles. These statistics are for an average sampling period.

Whatman 40 Blank Filters

The occurrence of non-zero blank values for the Whatman 40 filters used in the cumulative network should be borne in mind when interpreting data from this method. Typical loadings mg/filter) for these blank filters, are summarized in Table 1.

Table 1

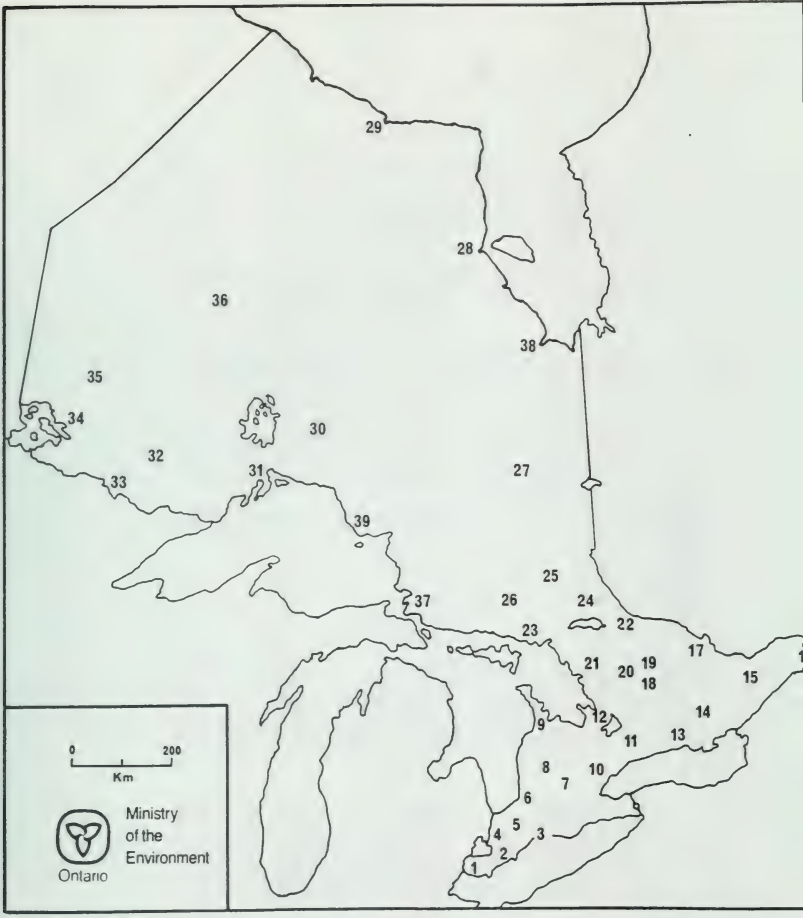
Chemical of Filters Parameters	Total Samples	Blank Loading (μg/filter) Mean*	S.D.*	Number ≥W
Sulphate	107	5.0 <T	0	22
Nitrate	107	1.4 <T	0.3	25
Calcium	96	2.88	0.68	96
Magnesium	97	0.69	1.33	65
Aluminum	97	0.59	0.56	45
Cadmium	97	0.010	0.006	91
Copper	97	0.03	0.02	70
Iron	97	0.92	0.70	95
Manganese	97	0.20	0.51	35
Nickel	97	0.04	0.07	54
Lead	97	0.12	0.13	38
Vanadium	97	0.02	0.002	36
Zinc	97	0.23	0.13	39
Sodium	107	2.66	0.95	106
Potassium	103	1.16	1.50	103
Chloride	107	8.8	2.8	105

*Calculated for ≥W values only.

RE2126

PART II

STATION DESCRIPTION AND LOCATION MAP



1. Colchester*
2. Merlin
3. Pt. Stanley*
4. Wilkesport*
5. Alvinston
6. Huron Park
7. Waterloo
8. Palmerston*
9. Shallow Lake*
10. Milton (removed March '84)
11. Uxbridge*
12. Coldwater
13. Campbellford*
14. Cloyne* (repl. Kalladar, June '83)
15. Smith's Falls*
16. Dalhousie Mills*
17. Golden Lake*
18. Wilberforce
19. Whitney
20. Dorset*
21. McKellar*
22. Mattawa*
23. Killarney*
24. Bear Island
25. Gowganda*
26. Azure Lake (repl. Ramsey, June '83)
27. Moonbeam*
28. Attawapiskat (rem. Feb '84)
29. Winisk (rem. Dec '86)
30. Geraldton (replaced Nakina, Aug '83)
31. Dorion*
32. Quetico Centre*
33. Lac la Croix
34. Experimental Lakes Area
35. Ear Falls*
36. Pickle Lake*
37. Turkey Lake*
38. Moosonee* (installed October '85)
39. Otter Island* (summer only)
40. Sutton, Quebec (Intercomparison Site)

* indicates both a wet and dry deposition network site

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS-ACIDIC PRECIPITATION IN ONTARIO STUDY
CUMULATIVE AMBIENT AIR SITES

STATION ID	MOE REGION	STATION NAME	ELEV (M)	LATITUDE (NORTH)	LONGITUDE (WEST)	UTM GRID CO-ORDINATES (NORTHING)	(EASTING)
000001-22-21-1041	SOUTHWESTERN	COLCHESTER	183	41°59'15"	82°55'41"	4649973	340284
000001-22-21-1061	SOUTHWESTERN	PORT STANLEY	213	42°40'22"	81°09'55"	4724277	486457
000001-22-21-1071	SOUTHWESTERN	WILKESPORT	183	42°42'11"	82°21'13"	4728515	389135
000001-22-21-1091	SOUTHWESTERN	SHALLOW LAKE	229	44°34'54"	81°06'58"	4936270	490782
000001-22-21-1101	SOUTHWESTERN	PALMERSTON	389	43°48'19"	80°54'12"	4850035	507776
000001-22-21-3011	CENTRAL	DORSET	320	45°13'26"	78°55'52"	5009656	662429
000001-22-21-3061	CENTRAL	UXBRIDGE	244	44°12'46"	79°12'38"	4896847	642958
000001-22-21-3081	CENTRAL	CAMPBELLFORD	175	44°17'28"	77°47'33"	4907783	277202
000001-22-21-4061	SOUTHEASTERN	SMITH'S FALLS	122	44°56'41"	75°57'48"	4977044	423999
000001-22-21-4071	SOUTHEASTERN	DALHOUSIE MILLS	69	45°19'00"	74°28'13"	5018048	541521
000001-22-21-4081	SOUTHEASTERN	GOLDEN LAKE	160	45°36'48"	77°12'03"	5053226	328397
000001-22-21-4091	SOUTHEASTERN	CLOYNE	259	44°49'10"	77°11'07"	4964999	327221
000001-22-21-5011	NORTHEASTERN	MCKELLAR	244	45°31'15"	79°55'19"	5041158	584196
000001-22-21-5021	NORTHEASTERN	KILLARNEY	183	45°58'20"	81°29'18"	5090859	462167
000001-22-21-5031	NORTHEASTERN	MATTAWA	198	46°16'39"	78°49'19"	5126968	667810
000001-22-21-5061	NORTHEASTERN	GOWGANDA	343	47°39'04"	80°46'32"	5277329	516647
000001-22-21-5071	NORTHEASTERN	MOONBEAM	244	49°19'40"	82°01'10"	5464175	425924
000001-22-21-5141	NORTHEASTERN	TURKEY LAKES	440	47°03'15"	84°24'20"	5214246	697468
000001-22-21-5161	NORTHEASTERN	MOOSONEE	8	51°12'35"	80°42'20"	5672970	520568
000001-22-21-5201	NORTHEASTERN	MCFARLANE LAKE	246	46°25'57"	81°57'03"	5142324	426948
000001-22-21-6011	NORTHWESTERN	DORION	244	48°50'33"	88°36'45"	5410982	381684
000001-22-21-6031	NORTHWESTERN	EAR FALLS	350	50°38'31"	93°13'13"	5609814	484424
000001-22-21-6041	NORTHWESTERN	PICKLE LAKE	360	51°02'41"	90°12'04"	5658308	696198
000001-22-21-6071	NORTHWESTERN	QUETICO CENTRE	420	48°24'44"	91°12'08"	5363461	633036
000001-22-21-6111	NORTHWESTERN	OTTER ISLAND	204	48°06'50"	86°04'25"	5329155	568954
000001-22-21-6121	NORTHWESTERN	GERALDTON	350	49°48'18"	86°45'52"	5516758	516950

PART III

SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=CAMPBELLFORD LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	9	9	9	9	9	9	9
MAXIMUM	10.37	6.97	0.191	0.776	0.939	0.690	0.122
MINIMUM	2.36	1.12	0.041	0.211	0.246	0.157	0.015
ARITH. MEAN	6.64	3.18	0.103	0.574	0.466	0.435	0.059
ARITH. STD. DEV	3.02	1.68	0.052	0.175	0.216	0.189	0.031
GEOM. MEAN	5.90	2.85	0.092	0.540	0.430	0.393	0.052
1ST QUARTILE	3.40	2.43	0.061	0.473	0.290	0.267	0.041
2ND QUARTILE	7.58	2.85	0.097	0.637	0.452	0.421	0.057
3RD QUARTILE	8.98	3.37	0.150	0.667	0.517	0.614	0.072
MISSING VALUES	1	1	1	1	1	1	1

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	9	9	9	9	9	9	9
MAXIMUM	0.359	0.199	0.095	0.281	0.016	0.0131	0.005
MINIMUM	0.076	0.000	0.033	0.000	0.003	0.0029	0.000
ARITH. MEAN	0.198	0.087	0.060	0.108	0.008	0.0065	0.003
ARITH. STD. DEV	0.106	0.062	0.019	0.115	0.004	0.0032	0.002
GEOM. MEAN	0.173	0.088	0.057	0.102	0.007	0.0060	0.002
1ST QUARTILE	0.103	0.046	0.045	0.008	0.005	0.0048	0.002
2ND QUARTILE	0.196	0.075	0.059	0.052	0.008	0.0053	0.003
3RD QUARTILE	0.306	0.129	0.068	0.231	0.010	0.0086	0.004
MISSING VALUES	1	1	1	1	1	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFOR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	9	9	9	9	9	9.00	9.00
MAXIMUM	0.00788	0.0026	0.0368	0.01416	1.6663	6.81	0.97
MINIMUM	0.00072	0.0000	0.0064	0.00039	0.4518	1.55	0.25
ARITH. MEAN	0.00239	0.0011	0.0207	0.00674	0.8724	4.38	0.68
ARITH. STD. DEV	0.00232	0.0008	0.0095	0.00488	0.3937	1.82	0.22
GEOM. MEAN	0.00180	0.0011	0.0185	0.00403	0.8038	3.97	0.64
1ST QUARTILE	0.00100	0.0004	0.0148	0.00139	0.5530	2.68	0.54
2ND QUARTILE	0.00177	0.0011	0.0190	0.00744	0.8152	4.77	0.72
3RD QUARTILE	0.00255	0.0016	0.0285	0.01040	1.0916	5.94	0.81
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=CLOYNE LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	10.13	9.24	0.226	0.614	0.363	0.601	3.418
MINIMUM	1.24	3.09	0.074	0.133	0.000	0.168	0.044
ARITH. MEAN	4.42	5.33	0.127	0.318	0.211	0.344	0.699
ARITH. STD. DEV	2.34	2.28	0.045	0.158	0.109	0.146	1.153
GEOM. MEAN	3.90	4.93	0.120	0.281	0.214	0.315	0.237
1ST QUARTILE	2.70	3.36	0.094	0.158	0.130	0.190	0.093
2ND QUARTILE	4.56	4.42	0.123	0.264	0.202	0.321	0.112
3RD QUARTILE	4.99	7.51	0.163	0.424	0.316	0.457	1.128
MISSING VALUES	0	0	0	0	0	0	2

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.639	0.171	0.092	0.233	0.011	0.0142	0.009
MINIMUM	0.100	0.037	0.033	0.000	0.000	0.0042	0.001
ARITH. MEAN	0.261	0.112	0.067	0.098	0.006	0.0074	0.003
ARITH. STD. DEV	0.163	0.045	0.018	0.073	0.003	0.0028	0.002
GEOM. MEAN	0.220	0.102	0.065	0.089	0.006	0.0070	0.002
1ST QUARTILE	0.112	0.074	0.054	0.046	0.003	0.0055	0.002
2ND QUARTILE	0.252	0.120	0.073	0.063	0.006	0.0069	0.002
3RD QUARTILE	0.364	0.157	0.082	0.164	0.009	0.0091	0.003
MISSING VALUES	0	0	0	0	0	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	11	11	11	11	11	11.00	11.00
MAXIMUM	0.00775	0.0028	0.0427	0.01147	2.2359	6.18	0.71
MINIMUM	0.00108	0.0005	0.0132	0.00335	0.6612	1.65	0.23
ARITH. MEAN	0.00272	0.0012	0.0209	0.00782	1.0565	3.99	0.44
ARITH. STD. DEV	0.00200	0.0007	0.0082	0.00275	0.4556	1.12	0.17
GEOM. MEAN	0.00222	0.0010	0.0198	0.00732	0.9894	3.82	0.42
1ST QUARTILE	0.00119	0.0006	0.0151	0.00517	0.7565	3.69	0.32
2ND QUARTILE	0.00208	0.0011	0.0196	0.00814	0.8848	4.02	0.36
3RD QUARTILE	0.00323	0.0016	0.0233	0.01037	1.1748	4.43	0.63
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=COLCHESTER LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	16.38	11.71	0.421	1.473	5.849	1.038	0.119
MINIMUM	7.92	0.34	0.030	0.232	0.063	0.440	0.005
ARITH. MEAN	11.68	5.16	0.171	0.997	2.111	0.676	0.060
ARITH. STD. DEV	2.97	3.36	0.102	0.372	1.917	0.165	0.042
GEOM. MEAN	11.34	3.70	0.141	0.896	0.996	0.659	0.038
1ST QUARTILE	8.92	3.39	0.099	0.853	0.283	0.561	0.010
2ND QUARTILE	11.04	4.45	0.166	1.089	2.182	0.625	0.072
3RD QUARTILE	14.84	7.96	0.217	1.196	3.312	0.781	0.092
MISSING VALUES	1	1	1	1	1	1	1

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.310	1.318	1.030	1.138	0.028	0.0311	0.007
MINIMUM	0.087	0.027	0.012	0.000	0.001	0.0006	0.001
ARITH. MEAN	0.168	0.349	0.262	0.364	0.016	0.0146	0.004
ARITH. STD. DEV	0.066	0.353	0.274	0.376	0.011	0.0085	0.002
GEOM. MEAN	0.158	0.216	0.159	0.191	0.010	0.0103	0.004
1ST QUARTILE	0.119	0.143	0.108	0.032	0.006	0.0085	0.003
2ND QUARTILE	0.156	0.243	0.213	0.233	0.020	0.0154	0.004
3RD QUARTILE	0.205	0.484	0.305	0.719	0.028	0.0199	0.005
MISSING VALUES	1	1	1	1	2	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00887	0.0075	0.0877	0.02045	1.5917	9.83	1.62
MINIMUM	0.00012	0.0002	0.0071	0.00077	0.1233	5.29	0.42
ARITH. MEAN	0.00324	0.0031	0.0536	0.00617	0.9411	7.56	1.17
ARITH. STD. DEV	0.00255	0.0027	0.0209	0.00681	0.4410	1.51	0.34
GEOM. MEAN	0.00220	0.0021	0.0472	0.00332	0.8029	7.42	1.11
1ST QUARTILE	0.00173	0.0014	0.0407	0.00096	0.6166	6.13	0.94
2ND QUARTILE	0.00219	0.0018	0.0548	0.00239	0.9478	7.81	1.24
3RD QUARTILE	0.00420	0.0063	0.0667	0.00972	1.3791	8.69	1.35
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=DALHOUSIE MILLS LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	19.63	13.73	0.393	1.636	7.935	7.853	3.599
MINIMUM	2.30	0.28	0.052	0.259	0.396	0.312	0.084
ARITH. MEAN	7.56	5.17	0.134	0.677	1.725	1.383	0.506
ARITH. STD. DEV	5.82	3.65	0.109	0.418	2.241	2.306	1.161
GEOM. MEAN	5.87	3.78	0.108	0.574	1.138	0.733	0.166
1ST QUARTILE	3.12	3.39	0.066	0.305	0.650	0.333	0.088
2ND QUARTILE	5.65	3.77	0.083	0.697	0.978	0.617	0.099
3RD QUARTILE	11.11	6.72	0.189	0.871	1.723	1.120	0.186
MISSING VALUES	1	1	1	1	1	1	2

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	5.726	1.111	1.032	0.627	0.044	0.0656	0.006
MINIMUM	0.114	0.000	0.051	0.042	0.000	0.0114	0.000
ARITH. MEAN	1.174	0.245	0.252	0.256	0.012	0.0296	0.004
ARITH. STD. DEV	1.907	0.318	0.286	0.191	0.012	0.0188	0.002
GEOM. MEAN	0.429	0.179	0.176	0.192	0.010	0.0244	0.004
1ST QUARTILE	0.124	0.071	0.106	0.078	0.007	0.0117	0.003
2ND QUARTILE	0.387	0.179	0.167	0.225	0.009	0.0278	0.003
3RD QUARTILE	1.345	0.263	0.272	0.348	0.012	0.0467	0.005
MISSING VALUES	1	1	1	1	1	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	11	11	11	11	11	11.00	11.00
MAXIMUM	0.02618	0.0071	0.0720	0.85079	13.7435	12.43	2.03
MINIMUM	0.00126	0.0000	0.0220	0.00060	0.0579	2.09	0.34
ARITH. MEAN	0.00462	0.0024	0.0376	0.09293	2.3341	5.50	0.81
ARITH. STD. DEV	0.00772	0.0021	0.0171	0.26654	4.2142	3.36	0.51
GEOM. MEAN	0.00254	0.0020	0.0349	0.00818	0.8717	4.71	0.69
1ST QUARTILE	0.00158	0.0007	0.0283	0.00371	0.5862	3.02	0.39
2ND QUARTILE	0.00177	0.0018	0.0314	0.00508	0.6420	3.82	0.77
3RD QUARTILE	0.00318	0.0036	0.0417	0.01751	1.9160	8.59	1.00
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=DORION LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	1.71	1.45	0.114	0.197	0.324	0.260	0.050
MINIMUM	0.00	0.16	0.016	0.024	0.000	0.082	0.000
ARITH. MEAN	0.88	0.98	0.038	0.081	0.077	0.146	0.021
ARITH. STD. DEV	0.56	0.46	0.028	0.052	0.091	0.055	0.014
GEOM. MEAN	0.81	0.83	0.032	0.066	0.085	0.138	0.020
1ST QUARTILE	0.39	0.55	0.020	0.033	0.000	0.114	0.012
2ND QUARTILE	0.75	1.14	0.031	0.080	0.070	0.124	0.018
3RD QUARTILE	1.43	1.43	0.042	0.098	0.121	0.187	0.031
MISSING VALUES	0	0	0	0	0	1	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.222	0.249	0.474	0.661	0.007	0.0087	0.004
MINIMUM	0.058	0.000	0.003	0.000	0.000	0.0000	0.000
ARITH. MEAN	0.125	0.050	0.086	0.079	0.003	0.0027	0.002
ARITH. STD. DEV	0.048	0.064	0.131	0.181	0.002	0.0022	0.001
GEOM. MEAN	0.117	0.037	0.042	0.044	0.003	0.0024	0.002
1ST QUARTILE	0.080	0.021	0.024	0.000	0.001	0.0014	0.001
2ND QUARTILE	0.121	0.030	0.039	0.024	0.002	0.0023	0.001
3RD QUARTILE	0.158	0.055	0.059	0.042	0.004	0.0031	0.003
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00798	0.0013	0.0646	0.01586	1.1261	1.29	0.24
MINIMUM	0.00000	0.0000	0.0000	0.00012	0.1490	0.12	0.04
ARITH. MEAN	0.00302	0.0004	0.0085	0.00538	0.4345	0.76	0.12
ARITH. STD. DEV	0.00310	0.0004	0.0172	0.00516	0.2997	0.38	0.06
GEOM. MEAN	0.00172	0.0004	0.0052	0.00247	0.3655	0.65	0.11
1ST QUARTILE	0.00043	0.0001	0.0003	0.00057	0.2510	0.43	0.07
2ND QUARTILE	0.00099	0.0002	0.0042	0.00389	0.3391	0.74	0.12
3RD QUARTILE	0.00651	0.0009	0.0081	0.00976	0.4763	1.13	0.14
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=DORSET LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	8.06	5.63	0.317	0.348	0.499	0.383	0.080
MINIMUM	0.00	0.24	0.034	0.013	0.000	0.000	0.000
ARITH. MEAN	3.76	2.66	0.169	0.137	0.135	0.115	0.037
ARITH. STD. DEV	2.35	1.25	0.082	0.119	0.138	0.135	0.022
GEOM. MEAN	3.59	2.26	0.145	0.077	0.124	0.170	0.041
1ST QUARTILE	2.41	2.11	0.097	0.025	0.059	0.000	0.024
2ND QUARTILE	3.49	2.51	0.169	0.162	0.100	0.022	0.037
3RD QUARTILE	5.12	3.03	0.229	0.242	0.180	0.231	0.047
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.355	0.310	0.358	0.157	0.011	0.0101	0.003
MINIMUM	0.000	0.000	0.000	0.000	0.002	0.0001	0.000
ARITH. MEAN	0.123	0.067	0.082	0.032	0.005	0.0039	0.002
ARITH. STD. DEV	0.102	0.087	0.106	0.045	0.004	0.0027	0.001
GEOM. MEAN	0.099	0.064	0.049	0.025	0.004	0.0029	0.002
1ST QUARTILE	0.035	0.014	0.024	0.002	0.002	0.0023	0.002
2ND QUARTILE	0.096	0.046	0.044	0.021	0.003	0.0029	0.002
3RD QUARTILE	0.191	0.066	0.101	0.037	0.007	0.0060	0.002
MISSING VALUES	0	0	0	0	4	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00481	0.0012	0.0328	0.01040	0.9410	4.86	0.53
MINIMUM	0.00000	0.0000	0.0010	0.00000	0.3004	0.08	0.06
ARITH. MEAN	0.00144	0.0006	0.0118	0.00343	0.6669	2.77	0.31
ARITH. STD. DEV	0.00138	0.0004	0.0072	0.00418	0.1930	1.22	0.13
GEOM. MEAN	0.00130	0.0007	0.0097	0.00118	0.6362	2.18	0.27
1ST QUARTILE	0.00050	0.0004	0.0091	0.00015	0.5426	2.09	0.21
2ND QUARTILE	0.00083	0.0007	0.0106	0.00045	0.7084	2.77	0.29
3RD QUARTILE	0.00244	0.0009	0.0131	0.00789	0.8254	3.26	0.39
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=EAR FALLS LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	2.56	1.66	0.069	1.020	0.271	0.330	0.045
MINIMUM	0.19	0.19	0.000	0.000	0.000	0.142	0.000
ARITH. MEAN	1.00	0.93	0.037	0.213	0.082	0.218	0.019
ARITH. STD. DEV	0.73	0.48	0.020	0.344	0.086	0.051	0.012
GEOM. MEAN	0.77	0.79	0.036	0.113	0.076	0.213	0.019
1ST QUARTILE	0.41	0.50	0.021	0.054	0.023	0.177	0.013
2ND QUARTILE	0.79	0.97	0.031	0.073	0.068	0.209	0.017
3RD QUARTILE	1.49	1.30	0.053	0.128	0.089	0.244	0.028
MISSING VALUES	2	2	0	0	2	2	2

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.391	0.109	0.281	0.181	0.006	0.0068	0.003
MINIMUM	0.098	0.000	0.000	0.000	0.000	0.0000	0.000
ARITH. MEAN	0.166	0.040	0.070	0.037	0.002	0.0025	0.001
ARITH. STD. DEV	0.082	0.035	0.078	0.053	0.002	0.0019	0.001
GEOM. MEAN	0.154	0.040	0.051	0.034	0.002	0.0023	0.001
1ST QUARTILE	0.129	0.017	0.018	0.000	0.000	0.0009	0.001
2ND QUARTILE	0.136	0.037	0.059	0.015	0.001	0.0022	0.001
3RD QUARTILE	0.182	0.054	0.094	0.057	0.003	0.0034	0.002
MISSING VALUES	2	2	2	2	3	2	2

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.02580	0.0026	0.0381	0.02396	1.2818	1.45	1.09
MINIMUM	0.00000	0.0000	0.0000	0.00018	0.0521	0.24	0.02
ARITH. MEAN	0.00505	0.0006	0.0073	0.00700	0.4299	0.81	0.25
ARITH. STD. DEV	0.00751	0.0007	0.0106	0.00793	0.3762	0.42	0.36
GEOM. MEAN	0.00332	0.0005	0.0060	0.00262	0.3064	0.69	0.13
1ST QUARTILE	0.00071	0.0002	0.0015	0.00044	0.1916	0.31	0.08
2ND QUARTILE	0.00222	0.0003	0.0059	0.00260	0.2773	0.83	0.11
3RD QUARTILE	0.00744	0.0009	0.0068	0.01446	0.5631	1.07	0.18
MISSING VALUES	2	2	2	2	2	2.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=GERALDTON LOVOL SITE NO.1

	SULFUR.DIOX	SULFATE	NITRIC	NITRATE	CALCIUM	CHLORIDE	POTASSIUM
	UG/M3	UG/M3	UG/M3	UG/M3	UG/M3	UG/M3	UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	1.64	1.58	0.089	0.156	0.689	0.275	0.131
MINIMUM	0.34	0.66	0.009	0.017	0.000	0.082	0.000
ARITH. MEAN	0.89	1.07	0.033	0.076	0.137	0.144	0.029
ARITH. STD. DEV	0.43	0.30	0.021	0.043	0.189	0.058	0.033
GEOM. MEAN	0.79	1.03	0.027	0.062	0.111	0.135	0.024
1ST QUARTILE	0.55	0.77	0.015	0.037	0.012	0.106	0.016
2ND QUARTILE	0.83	1.05	0.029	0.085	0.058	0.134	0.018
3RD QUARTILE	1.29	1.32	0.043	0.111	0.209	0.151	0.035
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM	IRON	ALUMINIUM	MAGNESIUM	LEAD	MANGANESE	COPPER
	UG/M3	UG/M3	UG/M3	UG/M3	UG/M3	UG/M3	UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.250	0.115	0.153	0.360	0.005	0.0050	0.015
MINIMUM	0.070	0.000	0.000	0.000	0.000	0.0000	0.000
ARITH. MEAN	0.132	0.046	0.042	0.059	0.001	0.0018	0.002
ARITH. STD. DEV	0.056	0.032	0.040	0.105	0.001	0.0016	0.004
GEOM. MEAN	0.122	0.042	0.035	0.040	0.001	0.0020	0.001
1ST QUARTILE	0.086	0.022	0.016	0.000	0.000	0.0004	0.001
2ND QUARTILE	0.113	0.039	0.028	0.020	0.001	0.0012	0.001
3RD QUARTILE	0.177	0.067	0.060	0.056	0.002	0.0032	0.002
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL	VANADIUM	ZINC	CADMIUM	SULFATE NYL	TOTAL SULFUR	TOTAL N NITRATE
	UG/M3	UG/M3	UG/M3	UG/M3	UG/M3	UG/M**3	UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00863	0.0013	0.0122	0.01340	0.9297	1.30	0.20
MINIMUM	0.00000	0.0000	0.0000	0.00011	0.2715	0.41	0.03
ARITH. MEAN	0.00244	0.0005	0.0039	0.00473	0.4511	0.80	0.11
ARITH. STD. DEV	0.00291	0.0005	0.0033	0.00434	0.1686	0.28	0.06
GEOM. MEAN	0.00188	0.0005	0.0032	0.00218	0.4284	0.76	0.09
1ST QUARTILE	0.00010	0.0001	0.0016	0.00036	0.3506	0.58	0.06
2ND QUARTILE	0.00139	0.0003	0.0032	0.00399	0.3901	0.73	0.10
3RD QUARTILE	0.00351	0.0010	0.0054	0.00779	0.5211	1.02	0.16
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=GOLDEN LAKE LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	7	7	7	7	7	7	7
MAXIMUM	14.07	4.77	0.163	0.441	0.266	0.380	0.074
MINIMUM	2.81	1.94	0.055	0.029	0.000	0.262	0.029
ARITH. MEAN	6.13	2.89	0.109	0.267	0.105	0.324	0.060
ARITH. STD. DEV	3.87	0.91	0.039	0.148	0.104	0.053	0.015
GEOM. MEAN	5.31	2.79	0.102	0.204	0.121	0.321	0.058
1ST QUARTILE	2.83	2.40	0.083	0.108	0.000	0.266	0.059
2ND QUARTILE	5.18	2.64	0.099	0.340	0.076	0.330	0.062
3RD QUARTILE	7.10	3.06	0.156	0.359	0.210	0.375	0.071
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	7	7	7	7	7	7	7
MAXIMUM	0.273	0.153	0.135	0.220	0.013	0.0120	0.005
MINIMUM	0.108	0.046	0.020	0.000	0.003	0.0042	0.001
ARITH. MEAN	0.197	0.085	0.053	0.112	0.006	0.0064	0.004
ARITH. STD. DEV	0.064	0.041	0.039	0.084	0.003	0.0026	0.001
GEOM. MEAN	0.187	0.078	0.044	0.113	0.005	0.0061	0.003
1ST QUARTILE	0.133	0.052	0.026	0.050	0.004	0.0044	0.003
2ND QUARTILE	0.220	0.072	0.042	0.085	0.005	0.0058	0.004
3RD QUARTILE	0.247	0.134	0.066	0.212	0.006	0.0067	0.005
MISSING VALUES	0	0	0	0	0	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	7	7	7	7	7	7.00	7.00
MAXIMUM	0.02681	0.0017	0.0227	0.02162	1.0974	8.02	0.53
MINIMUM	0.00100	0.0003	0.0088	0.00283	0.5232	2.43	0.08
ARITH. MEAN	0.00533	0.0012	0.0160	0.00802	0.8001	4.03	0.38
ARITH. STD. DEV	0.00951	0.0004	0.0055	0.00681	0.1807	1.89	0.18
GEOM. MEAN	0.00241	0.0011	0.0150	0.00617	0.7822	3.74	0.32
1ST QUARTILE	0.00134	0.0010	0.0092	0.00283	0.6837	3.00	0.19
2ND QUARTILE	0.00152	0.0012	0.0182	0.00510	0.8088	3.24	0.44
3RD QUARTILE	0.00350	0.0016	0.0204	0.01224	0.9093	4.43	0.51
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=GOWGANDA LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	10.43	2.92	0.137	0.276	0.221	0.379	0.052
MINIMUM	1.68	1.43	0.029	0.060	0.000	0.086	0.008
ARITH. MEAN	4.30	2.16	0.076	0.127	0.068	0.189	0.031
ARITH. STD. DEV	2.55	0.48	0.033	0.058	0.081	0.099	0.015
GEOM. MEAN	3.69	2.11	0.069	0.117	0.066	0.168	0.027
1ST QUARTILE	2.29	1.69	0.056	0.084	0.000	0.100	0.021
2ND QUARTILE	3.90	2.28	0.071	0.117	0.022	0.169	0.031
3RD QUARTILE	6.05	2.56	0.093	0.162	0.134	0.263	0.046
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.321	0.256	0.231	0.380	0.010	0.0070	0.007
MINIMUM	0.060	0.000	0.011	0.000	0.000	0.0021	0.002
ARITH. MEAN	0.152	0.072	0.091	0.096	0.004	0.0036	0.004
ARITH. STD. DEV	0.085	0.073	0.078	0.138	0.004	0.0017	0.002
GEOM. MEAN	0.131	0.065	0.063	0.067	0.004	0.0033	0.004
1ST QUARTILE	0.073	0.029	0.027	0.009	0.002	0.0022	0.003
2ND QUARTILE	0.130	0.045	0.064	0.038	0.003	0.0035	0.004
3RD QUARTILE	0.226	0.098	0.160	0.158	0.009	0.0045	0.006
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00512	0.0007	0.0295	0.01148	1.0586	5.97	0.37
MINIMUM	0.00061	0.0000	0.0041	0.00022	0.4599	1.64	0.11
ARITH. MEAN	0.00201	0.0003	0.0110	0.00272	0.6467	2.87	0.20
ARITH. STD. DEV	0.00155	0.0002	0.0061	0.00348	0.2038	1.27	0.07
GEOM. MEAN	0.00156	0.0004	0.0099	0.00124	0.6214	2.65	0.19
1ST QUARTILE	0.00100	0.0000	0.0077	0.00034	0.4859	1.81	0.15
2ND QUARTILE	0.00125	0.0004	0.0099	0.00180	0.5991	2.49	0.19
3RD QUARTILE	0.00377	0.0005	0.0118	0.00389	0.7620	3.84	0.25
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=KILLARNEY LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	13.05	4.81	0.166	0.372	0.399	0.398	0.062
MINIMUM	1.77	1.34	0.044	0.116	0.000	0.104	0.008
ARITH. MEAN	6.86	2.74	0.113	0.221	0.145	0.222	0.037
ARITH. STD. DEV	3.22	1.09	0.038	0.068	0.118	0.086	0.017
GEOM. MEAN	6.01	2.53	0.106	0.211	0.121	0.208	0.032
1ST QUARTILE	3.65	1.66	0.079	0.190	0.045	0.152	0.022
2ND QUARTILE	7.61	2.69	0.118	0.220	0.144	0.212	0.037
3RD QUARTILE	8.88	3.60	0.148	0.250	0.172	0.256	0.052
MISSING VALUES	1	1	1	1	1	1	1

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.210	0.214	0.218	0.292	0.012	0.0082	0.011
MINIMUM	0.081	0.000	0.018	0.000	0.000	0.0019	0.002
ARITH. MEAN	0.131	0.097	0.100	0.078	0.007	0.0044	0.005
ARITH. STD. DEV	0.052	0.065	0.071	0.103	0.004	0.0020	0.003
GEOM. MEAN	0.122	0.089	0.076	0.058	0.006	0.0040	0.005
1ST QUARTILE	0.085	0.052	0.036	0.018	0.003	0.0027	0.003
2ND QUARTILE	0.107	0.082	0.081	0.039	0.007	0.0041	0.005
3RD QUARTILE	0.193	0.155	0.175	0.087	0.010	0.0061	0.007
MISSING VALUES	1	1	1	1	2	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00789	0.0011	0.0159	0.01952	1.2780	7.71	0.54
MINIMUM	0.00026	0.0000	0.0069	0.00025	0.4925	2.24	0.22
ARITH. MEAN	0.00340	0.0005	0.0108	0.00387	0.7691	4.34	0.33
ARITH. STD. DEV	0.00231	0.0004	0.0030	0.00614	0.2138	1.53	0.09
GEOM. MEAN	0.00257	0.0006	0.0105	0.00124	0.7442	4.09	0.32
1ST QUARTILE	0.00180	0.0001	0.0082	0.00029	0.5904	2.81	0.25
2ND QUARTILE	0.00283	0.0005	0.0104	0.00062	0.8030	4.58	0.32
3RD QUARTILE	0.00469	0.0007	0.0134	0.00605	0.8582	5.13	0.41
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=MATTAWA LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	9.57	3.89	0.118	0.345	0.336	0.457	0.087
MINIMUM	1.82	0.19	0.013	0.045	0.000	0.115	0.004
ARITH. MEAN	5.28	2.26	0.065	0.175	0.134	0.268	0.048
ARITH. STD. DEV	2.73	0.93	0.028	0.087	0.113	0.110	0.025
GEOM. MEAN	4.66	1.90	0.058	0.152	0.112	0.246	0.038
1ST QUARTILE	3.37	1.87	0.049	0.109	0.054	0.146	0.029
2ND QUARTILE	4.42	2.16	0.061	0.163	0.097	0.276	0.054
3RD QUARTILE	8.41	2.76	0.085	0.246	0.252	0.338	0.066
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.868	0.624	0.645	0.501	0.017	0.0191	0.004
MINIMUM	0.050	0.000	0.007	0.000	0.000	0.0000	0.001
ARITH. MEAN	0.226	0.278	0.282	0.158	0.006	0.0098	0.003
ARITH. STD. DEV	0.224	0.231	0.249	0.168	0.007	0.0064	0.001
GEOM. MEAN	0.171	0.226	0.154	0.114	0.006	0.0092	0.003
1ST QUARTILE	0.103	0.061	0.042	0.014	0.000	0.0039	0.002
2ND QUARTILE	0.149	0.180	0.245	0.118	0.005	0.0088	0.003
3RD QUARTILE	0.246	0.566	0.634	0.292	0.013	0.0160	0.003
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	11	11	11	11	11	11.00	11.00
MAXIMUM	0.00287	0.0016	0.0335	0.02098	1.1978	5.50	0.46
MINIMUM	0.00077	0.0000	0.0017	0.00000	0.3625	0.97	0.06
ARITH. MEAN	0.00167	0.0010	0.0154	0.00465	0.6811	3.39	0.24
ARITH. STD. DEV	0.00066	0.0005	0.0079	0.00653	0.2276	1.39	0.11
GEOM. MEAN	0.00156	0.0010	0.0129	0.00224	0.6491	3.10	0.21
1ST QUARTILE	0.00131	0.0008	0.0113	0.00050	0.5429	2.66	0.15
2ND QUARTILE	0.00151	0.0010	0.0157	0.00110	0.6243	2.93	0.24
3RD QUARTILE	0.00215	0.0013	0.0190	0.00814	0.8226	4.83	0.30
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=MCKELLAR LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	13.49	5.19	0.213	0.413	0.518	0.614	0.054
MINIMUM	2.34	1.52	0.046	0.096	0.000	0.134	0.007
ARITH. MEAN	5.86	2.84	0.126	0.243	0.140	0.286	0.034
ARITH. STD. DEV	3.65	0.92	0.048	0.108	0.152	0.160	0.015
GEOM. MEAN	5.00	2.71	0.117	0.217	0.168	0.250	0.030
1ST QUARTILE	3.31	2.27	0.091	0.120	0.000	0.149	0.024
2ND QUARTILE	3.91	2.58	0.115	0.266	0.115	0.214	0.032
3RD QUARTILE	8.23	3.30	0.171	0.307	0.193	0.430	0.048
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.422	0.244	0.159	0.319	0.062	0.0063	0.024
MINIMUM	0.039	0.000	0.033	0.000	0.000	0.0018	0.002
ARITH. MEAN	0.176	0.086	0.070	0.074	0.010	0.0038	0.004
ARITH. STD. DEV	0.116	0.066	0.036	0.093	0.017	0.0012	0.005
GEOM. MEAN	0.140	0.090	0.064	0.056	0.006	0.0036	0.003
1ST QUARTILE	0.078	0.053	0.045	0.020	0.002	0.0031	0.002
2ND QUARTILE	0.142	0.063	0.058	0.042	0.004	0.0036	0.003
3RD QUARTILE	0.279	0.123	0.083	0.109	0.011	0.0040	0.004
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00458	0.0010	0.0298	0.01115	2.1272	7.57	0.59
MINIMUM	0.00000	0.0000	0.0015	0.00006	0.1211	1.68	0.14
ARITH. MEAN	0.00185	0.0005	0.0119	0.00288	0.8477	3.88	0.37
ARITH. STD. DEV	0.00140	0.0004	0.0065	0.00343	0.5035	1.76	0.15
GEOM. MEAN	0.00159	0.0006	0.0101	0.00119	0.7168	3.55	0.34
1ST QUARTILE	0.00086	0.0001	0.0089	0.00040	0.6525	2.77	0.24
2ND QUARTILE	0.00130	0.0006	0.0111	0.00177	0.6966	3.35	0.38
3RD QUARTILE	0.00341	0.0008	0.0139	0.00522	0.8521	4.87	0.49
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=MOONBEAM LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	3.86	1.97	0.047	0.148	2.013	0.262	0.058
MINIMUM	0.49	0.86	0.010	0.026	0.000	0.098	0.008
ARITH. MEAN	1.51	1.43	0.026	0.071	0.350	0.194	0.032
ARITH. STD. DEV	0.98	0.32	0.013	0.031	0.572	0.049	0.014
GEOM. MEAN	1.25	1.39	0.023	0.065	0.170	0.188	0.029
1ST QUARTILE	0.64	1.23	0.015	0.049	0.064	0.169	0.023
2ND QUARTILE	1.43	1.44	0.023	0.070	0.118	0.191	0.029
3RD QUARTILE	1.78	1.65	0.041	0.087	0.522	0.245	0.043
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	0.228	1.450	0.359	0.461	0.011	0.0096	0.006
MINIMUM	0.091	0.000	0.016	0.000	0.000	0.0022	0.001
ARITH. MEAN	0.155	0.193	0.135	0.106	0.004	0.0043	0.003
ARITH. STD. DEV	0.049	0.405	0.122	0.164	0.003	0.0024	0.001
GEOM. MEAN	0.147	0.081	0.081	0.074	0.004	0.0037	0.002
1ST QUARTILE	0.104	0.029	0.029	0.004	0.002	0.0025	0.002
2ND QUARTILE	0.167	0.049	0.089	0.040	0.005	0.0030	0.002
3RD QUARTILE	0.196	0.129	0.246	0.129	0.006	0.0059	0.003
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	12	12	12	12	12	12.00	12.00
MAXIMUM	0.00565	0.0009	0.0186	0.01698	0.8947	2.37	0.18
MINIMUM	0.00000	0.0000	0.0032	0.00013	0.3049	0.53	0.04
ARITH. MEAN	0.00162	0.0004	0.0085	0.00372	0.4540	1.23	0.10
ARITH. STD. DEV	0.00183	0.0003	0.0041	0.00531	0.1512	0.50	0.04
GEOM. MEAN	0.00116	0.0004	0.0077	0.00119	0.4370	1.13	0.09
1ST QUARTILE	0.00021	0.0002	0.0057	0.00028	0.3662	0.87	0.07
2ND QUARTILE	0.00083	0.0004	0.0070	0.00084	0.4180	1.24	0.10
3RD QUARTILE	0.00332	0.0007	0.0112	0.00632	0.4835	1.41	0.12
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=MOOSONEE LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	1.77	2.08	0.030	0.082	0.355	0.639	0.040
MINIMUM	0.22	0.43	0.000	0.000	0.000	0.132	0.006
ARITH. MEAN	0.88	1.04	0.016	0.037	0.079	0.316	0.020
ARITH. STD. DEV	0.47	0.42	0.007	0.022	0.092	0.129	0.010
GEOM. MEAN	0.74	0.97	0.016	0.034	0.072	0.293	0.018
1ST QUARTILE	0.44	0.67	0.011	0.020	0.031	0.229	0.013
2ND QUARTILE	0.95	1.05	0.016	0.038	0.057	0.288	0.017
3RD QUARTILE	1.14	1.20	0.020	0.051	0.080	0.371	0.027
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.347	0.068	0.062	0.265	0.008	0.0247	0.003
MINIMUM	0.096	0.000	0.011	0.000	0.000	0.0009	0.001
ARITH. MEAN	0.218	0.026	0.023	0.069	0.003	0.0036	0.002
ARITH. STD. DEV	0.076	0.024	0.015	0.089	0.003	0.0064	0.001
GEOM. MEAN	0.204	0.028	0.020	0.064	0.003	0.0019	0.001
1ST QUARTILE	0.156	0.004	0.012	0.013	0.001	0.0011	0.001
2ND QUARTILE	0.244	0.021	0.016	0.042	0.002	0.0013	0.001
3RD QUARTILE	0.256	0.052	0.031	0.068	0.006	0.0028	0.002
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00908	0.0029	0.0080	0.01726	0.5847	1.36	0.10
MINIMUM	0.00000	0.0000	0.0000	0.00000	0.0926	0.25	0.02
ARITH. MEAN	0.00174	0.0005	0.0035	0.00408	0.3341	0.79	0.05
ARITH. STD. DEV	0.00263	0.0008	0.0022	0.00583	0.1431	0.33	0.02
GEOM. MEAN	0.00129	0.0004	0.0033	0.00115	0.2999	0.71	0.05
1ST QUARTILE	0.00000	0.0000	0.0020	0.00016	0.2257	0.51	0.03
2ND QUARTILE	0.00046	0.0002	0.0033	0.00096	0.3118	0.79	0.06
3RD QUARTILE	0.00315	0.0007	0.0048	0.00606	0.4558	1.02	0.07
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=PALMERSTON LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	18.52	8.06	0.254	0.928	0.815	0.650	0.089
MINIMUM	0.36	0.11	0.000	0.156	0.233	0.199	0.000
ARITH. MEAN	6.57	3.61	0.129	0.708	0.411	0.402	0.040
ARITH. STD. DEV	5.02	1.85	0.073	0.206	0.191	0.128	0.025
GEOM. MEAN	4.70	2.78	0.129	0.658	0.377	0.383	0.036
1ST QUARTILE	3.29	2.76	0.080	0.621	0.263	0.300	0.017
2ND QUARTILE	4.39	3.41	0.111	0.729	0.349	0.401	0.045
3RD QUARTILE	8.93	4.39	0.178	0.869	0.571	0.487	0.053
MISSING VALUES	1	1	1	1	1	1	1

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.275	0.236	0.224	0.223	0.022	0.0134	0.013
MINIMUM	0.071	0.044	0.000	0.045	0.000	0.0023	0.001
ARITH. MEAN	0.148	0.117	0.103	0.119	0.009	0.0069	0.003
ARITH. STD. DEV	0.061	0.055	0.065	0.066	0.007	0.0029	0.003
GEOM. MEAN	0.137	0.106	0.100	0.102	0.009	0.0063	0.002
1ST QUARTILE	0.093	0.069	0.058	0.062	0.004	0.0054	0.002
2ND QUARTILE	0.144	0.109	0.089	0.095	0.007	0.0066	0.002
3RD QUARTILE	0.180	0.160	0.135	0.191	0.015	0.0083	0.003
MISSING VALUES	1	1	1	1	2	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00524	0.0014	0.0353	0.02136	1.8609	10.38	1.16
MINIMUM	0.00035	0.0006	0.0031	0.00023	0.4073	0.22	0.16
ARITH. MEAN	0.00209	0.0011	0.0199	0.00600	0.9567	4.49	0.84
ARITH. STD. DEV	0.00144	0.0003	0.0084	0.00653	0.4443	2.58	0.25
GEOM. MEAN	0.00164	0.0010	0.0176	0.00247	0.8755	3.47	0.77
1ST QUARTILE	0.00089	0.0008	0.0155	0.00053	0.6998	3.08	0.79
2ND QUARTILE	0.00172	0.0011	0.0193	0.00469	0.8826	4.08	0.84
3RD QUARTILE	0.00307	0.0013	0.0236	0.01056	1.0463	5.57	0.99
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=PICKLE LAKE LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	2.00	1.29	0.077	0.123	0.875	0.399	0.037
MINIMUM	0.00	0.35	0.012	0.012	0.022	0.081	0.007
ARITH. MEAN	0.80	0.84	0.027	0.052	0.339	0.200	0.018
ARITH. STD. DEV	0.63	0.33	0.019	0.031	0.294	0.098	0.011
GEOM. MEAN	0.71	0.78	0.023	0.045	0.198	0.180	0.015
1ST QUARTILE	0.39	0.51	0.014	0.034	0.055	0.124	0.009
2ND QUARTILE	0.53	0.86	0.020	0.046	0.294	0.184	0.016
3RD QUARTILE	1.23	1.24	0.033	0.076	0.566	0.259	0.029
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.249	0.528	0.600	0.308	0.010	0.0153	0.018
MINIMUM	0.072	0.017	0.003	0.000	0.001	0.0006	0.001
ARITH. MEAN	0.141	0.171	0.170	0.080	0.005	0.0041	0.005
ARITH. STD. DEV	0.058	0.175	0.202	0.090	0.004	0.0043	0.006
GEOM. MEAN	0.131	0.090	0.070	0.048	0.004	0.0026	0.003
1ST QUARTILE	0.100	0.022	0.023	0.006	0.002	0.0011	0.001
2ND QUARTILE	0.109	0.106	0.068	0.053	0.004	0.0022	0.002
3RD QUARTILE	0.178	0.303	0.337	0.127	0.010	0.0063	0.010
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	11	11	11	11	11	11.00	11.00
MAXIMUM	0.00622	0.0014	0.0192	0.01929	0.8530	1.43	0.16
MINIMUM	0.00000	0.0000	0.0000	0.00013	0.1720	0.17	0.04
ARITH. MEAN	0.00268	0.0005	0.0050	0.00594	0.3816	0.68	0.08
ARITH. STD. DEV	0.00207	0.0004	0.0054	0.00618	0.2078	0.36	0.04
GEOM. MEAN	0.00221	0.0004	0.0036	0.00218	0.3368	0.59	0.07
1ST QUARTILE	0.00116	0.0002	0.0009	0.00035	0.2015	0.37	0.05
2ND QUARTILE	0.00229	0.0003	0.0036	0.00642	0.3363	0.63	0.06
3RD QUARTILE	0.00470	0.0009	0.0058	0.01044	0.4763	0.83	0.10
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=PORT STANLEY LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	13.74	8.92	0.256	1.217	0.853	0.847	0.143
MINIMUM	0.56	0.20	0.073	0.139	0.000	0.107	0.004
ARITH. MEAN	7.68	4.20	0.176	0.761	0.437	0.445	0.062
ARITH. STD. DEV	3.53	2.50	0.064	0.278	0.289	0.183	0.041
GEOM. MEAN	6.39	3.17	0.163	0.687	0.356	0.405	0.045
1ST QUARTILE	5.73	2.37	0.110	0.552	0.203	0.321	0.027
2ND QUARTILE	7.05	3.73	0.187	0.811	0.407	0.443	0.053
3RD QUARTILE	9.82	6.13	0.229	0.956	0.710	0.510	0.095
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.328	2.360	0.466	0.591	0.030	0.0369	0.005
MINIMUM	0.067	0.009	0.003	0.000	0.000	0.0010	0.001
ARITH. MEAN	0.158	0.344	0.156	0.129	0.010	0.0133	0.003
ARITH. STD. DEV	0.076	0.617	0.135	0.173	0.009	0.0099	0.001
GEOM. MEAN	0.144	0.162	0.091	0.082	0.007	0.0096	0.003
1ST QUARTILE	0.107	0.121	0.055	0.016	0.004	0.0056	0.002
2ND QUARTILE	0.129	0.148	0.107	0.070	0.006	0.0106	0.003
3RD QUARTILE	0.191	0.282	0.249	0.138	0.015	0.0197	0.005
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00645	0.0024	0.0350	0.01251	1.8809	7.74	1.44
MINIMUM	0.00080	0.0004	0.0006	0.00017	0.5790	0.35	0.21
ARITH. MEAN	0.00271	0.0015	0.0267	0.00382	1.0906	5.24	0.94
ARITH. STD. DEV	0.00185	0.0006	0.0109	0.00424	0.4105	1.83	0.32
GEOM. MEAN	0.00221	0.0013	0.0205	0.00159	1.0245	4.47	0.86
1ST QUARTILE	0.00140	0.0009	0.0208	0.00047	0.7944	4.51	0.74
2ND QUARTILE	0.00168	0.0017	0.0307	0.00146	0.9411	5.77	0.98
3RD QUARTILE	0.00428	0.0018	0.0342	0.00804	1.4759	6.12	1.16
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=QUETICO CENTRE LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	1.88	2.71	0.230	0.522	0.346	0.418	0.182
MINIMUM	0.26	0.04	0.012	0.029	0.000	0.112	0.002
ARITH. MEAN	0.91	1.01	0.064	0.121	0.140	0.200	0.039
ARITH. STD. DEV	0.55	0.74	0.067	0.142	0.131	0.099	0.051
GEOM. MEAN	0.76	0.66	0.042	0.081	0.103	0.183	0.021
1ST QUARTILE	0.48	0.41	0.021	0.048	0.028	0.123	0.008
2ND QUARTILE	0.74	0.95	0.040	0.063	0.093	0.175	0.026
3RD QUARTILE	1.50	1.39	0.087	0.125	0.303	0.194	0.050
MISSING VALUES	1	0	1	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.368	0.158	0.187	0.166	0.011	0.0066	0.004
MINIMUM	0.051	0.016	0.000	0.000	0.000	0.0009	0.000
ARITH. MEAN	0.176	0.070	0.062	0.043	0.003	0.0035	0.002
ARITH. STD. DEV	0.098	0.046	0.069	0.052	0.003	0.0020	0.001
GEOM. MEAN	0.151	0.055	0.033	0.031	0.002	0.0029	0.001
1ST QUARTILE	0.089	0.022	0.005	0.006	0.000	0.0015	0.001
2ND QUARTILE	0.163	0.064	0.038	0.027	0.002	0.0031	0.002
3RD QUARTILE	0.249	0.101	0.101	0.075	0.004	0.0056	0.002
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	11	11	11	11	11	11.00	11.00
MAXIMUM	0.00687	0.0014	0.0090	0.01388	0.8515	1.26	0.75
MINIMUM	0.00000	0.0000	0.0000	0.00017	0.0000	0.26	0.04
ARITH. MEAN	0.00297	0.0005	0.0039	0.00574	0.3822	0.78	0.19
ARITH. STD. DEV	0.00243	0.0004	0.0032	0.00557	0.3066	0.33	0.21
GEOM. MEAN	0.00248	0.0005	0.0030	0.00226	0.4152	0.71	0.13
1ST QUARTILE	0.00093	0.0002	0.0007	0.00035	0.1251	0.50	0.07
2ND QUARTILE	0.00249	0.0003	0.0040	0.00552	0.3180	0.77	0.15
3RD QUARTILE	0.00468	0.0009	0.0068	0.01159	0.7246	1.07	0.20
MISSING VALUES	0	0	0	0	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=SHALLOW LAKE LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	15.33	5.26	0.163	0.784	0.531	0.395	0.127
MINIMUM	0.07	0.00	0.003	0.013	0.000	0.070	0.012
ARITH. MEAN	5.00	2.58	0.088	0.404	0.230	0.246	0.046
ARITH. STD. DEV	4.13	1.56	0.046	0.221	0.180	0.095	0.031
GEOM. MEAN	3.18	2.46	0.065	0.304	0.205	0.226	0.038
1ST QUARTILE	2.63	1.51	0.052	0.240	0.045	0.182	0.023
2ND QUARTILE	3.80	2.21	0.092	0.443	0.235	0.235	0.045
3RD QUARTILE	6.42	3.92	0.121	0.503	0.373	0.308	0.058
MISSING VALUES	0	0	0	0	0	1	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.293	0.342	0.367	0.167	0.023	0.0190	0.004
MINIMUM	0.044	0.000	0.003	0.000	0.000	0.0006	0.001
ARITH. MEAN	0.144	0.081	0.086	0.053	0.007	0.0057	0.002
ARITH. STD. DEV	0.073	0.087	0.103	0.055	0.006	0.0047	0.001
GEOM. MEAN	0.126	0.058	0.051	0.045	0.005	0.0042	0.002
1ST QUARTILE	0.083	0.023	0.029	0.003	0.002	0.0027	0.002
2ND QUARTILE	0.138	0.069	0.054	0.056	0.006	0.0049	0.002
3RD QUARTILE	0.203	0.108	0.068	0.072	0.008	0.0069	0.003
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00950	0.0016	0.0228	0.00983	1.3371	8.98	0.90
MINIMUM	0.00000	0.0000	0.0006	0.00012	0.0000	0.04	0.02
ARITH. MEAN	0.00280	0.0007	0.0118	0.00322	0.7321	3.36	0.49
ARITH. STD. DEV	0.00262	0.0006	0.0061	0.00355	0.3089	2.29	0.25
GEOM. MEAN	0.00208	0.0009	0.0091	0.00143	0.7682	2.22	0.38
1ST QUARTILE	0.00061	0.0002	0.0088	0.00031	0.6328	2.11	0.32
2ND QUARTILE	0.00248	0.0006	0.0115	0.00208	0.7056	3.08	0.54
3RD QUARTILE	0.00404	0.0012	0.0161	0.00639	0.8756	4.14	0.61
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=SMITHS FALLS LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	10.81	6.51	0.224	0.692	1.819	1.192	0.175
MINIMUM	1.55	2.02	0.054	0.190	0.097	0.164	0.018
ARITH. MEAN	4.73	3.61	0.103	0.425	0.751	0.433	0.082
ARITH. STD. DEV	2.49	1.34	0.049	0.160	0.517	0.309	0.051
GEOM. MEAN	4.21	3.41	0.094	0.396	0.580	0.355	0.067
1ST QUARTILE	3.31	2.64	0.061	0.282	0.386	0.191	0.041
2ND QUARTILE	4.01	3.16	0.094	0.397	0.533	0.316	0.070
3RD QUARTILE	5.52	4.14	0.118	0.579	1.165	0.534	0.115
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.723	0.388	0.241	0.820	0.014	0.0232	0.004
MINIMUM	0.094	0.000	0.025	0.046	0.000	0.0059	0.001
ARITH. MEAN	0.289	0.180	0.121	0.335	0.010	0.0128	0.002
ARITH. STD. DEV	0.199	0.109	0.067	0.241	0.004	0.0059	0.001
GEOM. MEAN	0.234	0.173	0.103	0.260	0.010	0.0116	0.002
1ST QUARTILE	0.125	0.107	0.071	0.167	0.007	0.0074	0.001
2ND QUARTILE	0.234	0.142	0.095	0.252	0.011	0.0111	0.002
3RD QUARTILE	0.439	0.270	0.182	0.490	0.013	0.0181	0.003
MISSING VALUES	0	0	0	0	0	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00322	0.0027	0.0271	0.00984	1.0380	6.41	0.80
MINIMUM	0.00094	0.0005	0.0094	0.00353	0.4618	2.02	0.29
ARITH. MEAN	0.00162	0.0014	0.0185	0.00747	0.7141	3.57	0.53
ARITH. STD. DEV	0.00071	0.0007	0.0057	0.00191	0.1732	1.23	0.17
GEOM. MEAN	0.00151	0.0012	0.0177	0.00719	0.6954	3.39	0.50
1ST QUARTILE	0.00106	0.0009	0.0148	0.00609	0.6001	2.65	0.37
2ND QUARTILE	0.00148	0.0011	0.0163	0.00825	0.6839	3.33	0.48
3RD QUARTILE	0.00178	0.0021	0.0245	0.00876	0.8529	4.29	0.71
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=TURKEY LAKES LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	5.89	3.49	0.163	0.273	0.347	0.276	0.082
MINIMUM	0.88	1.46	0.034	0.061	0.000	0.073	0.009
ARITH. MEAN	2.52	2.02	0.081	0.150	0.106	0.174	0.033
ARITH. STD. DEV	1.41	0.56	0.038	0.063	0.105	0.062	0.021
GEOM. MEAN	2.19	1.96	0.073	0.137	0.107	0.163	0.028
1ST QUARTILE	1.32	1.57	0.052	0.095	0.015	0.120	0.016
2ND QUARTILE	2.26	1.88	0.079	0.152	0.069	0.172	0.025
3RD QUARTILE	3.39	2.28	0.105	0.189	0.192	0.233	0.051
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.215	0.140	0.203	0.284	0.009	0.0088	0.009
MINIMUM	0.049	0.000	0.026	0.000	0.000	0.0020	0.001
ARITH. MEAN	0.130	0.065	0.072	0.075	0.003	0.0043	0.003
ARITH. STD. DEV	0.056	0.045	0.048	0.088	0.003	0.0020	0.002
GEOM. MEAN	0.118	0.067	0.061	0.069	0.003	0.0039	0.002
1ST QUARTILE	0.075	0.029	0.033	0.010	0.000	0.0026	0.002
2ND QUARTILE	0.141	0.057	0.068	0.039	0.003	0.0043	0.002
3RD QUARTILE	0.181	0.102	0.096	0.095	0.005	0.0054	0.003
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.00514	0.0010	0.0313	0.01257	1.0230	3.48	0.37
MINIMUM	0.00000	0.0000	0.0027	0.00000	0.4339	1.07	0.12
ARITH. MEAN	0.00167	0.0004	0.0092	0.00354	0.6545	1.93	0.23
ARITH. STD. DEV	0.00178	0.0003	0.0076	0.00456	0.1659	0.70	0.09
GEOM. MEAN	0.00113	0.0005	0.0073	0.00131	0.6365	1.82	0.22
1ST QUARTILE	0.00038	0.0000	0.0049	0.00013	0.5254	1.34	0.15
2ND QUARTILE	0.00102	0.0004	0.0063	0.00127	0.6429	1.78	0.23
3RD QUARTILE	0.00325	0.0004	0.0118	0.00609	0.7693	2.45	0.31
MISSING VALUES	0	0	0	0	0	0.00	0.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=UXBRIDGE LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	46.20	41.25	1.699	4.246	7.886	4.853	0.152
MINIMUM	1.37	0.75	0.006	0.108	0.000	0.174	0.016
ARITH. MEAN	8.44	5.74	0.205	0.697	0.916	0.732	0.052
ARITH. STD. DEV	12.49	11.25	0.472	1.131	2.206	1.308	0.040
GEOM. MEAN	4.74	2.82	0.071	0.411	0.352	0.406	0.041
1ST QUARTILE	2.47	1.59	0.034	0.264	0.144	0.241	0.023
2ND QUARTILE	4.10	2.37	0.072	0.378	0.237	0.271	0.034
3RD QUARTILE	9.61	3.90	0.120	0.608	0.473	0.604	0.079
MISSING VALUES	1	1	1	1	1	1	1

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	2.275	2.062	1.092	0.789	0.249	0.0849	0.042
MINIMUM	0.073	0.017	0.014	0.000	0.000	0.0021	0.001
ARITH. MEAN	0.378	0.252	0.155	0.104	0.029	0.0127	0.006
ARITH. STD. DEV	0.609	0.574	0.301	0.223	0.073	0.0231	0.012
GEOM. MEAN	0.211	0.092	0.069	0.064	0.010	0.0065	0.003
1ST QUARTILE	0.098	0.052	0.037	0.000	0.003	0.0033	0.001
2ND QUARTILE	0.195	0.066	0.060	0.024	0.007	0.0048	0.003
3RD QUARTILE	0.358	0.136	0.091	0.121	0.013	0.0097	0.005
MISSING VALUES	1	1	1	1	2	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.01213	0.0061	0.2396	0.01464	12.4355	36.85	5.94
MINIMUM	0.00000	0.0001	0.0057	0.00025	0.1902	1.06	0.18
ARITH. MEAN	0.00316	0.0012	0.0383	0.00562	1.6583	6.13	0.90
ARITH. STD. DEV	0.00328	0.0016	0.0641	0.00541	3.4028	9.90	1.60
GEOM. MEAN	0.00298	0.0008	0.0219	0.00234	0.7937	3.45	0.51
1ST QUARTILE	0.00124	0.0006	0.0115	0.00030	0.5621	1.66	0.29
2ND QUARTILE	0.00232	0.0009	0.0200	0.00576	0.7423	2.97	0.47
3RD QUARTILE	0.00433	0.0012	0.0314	0.00919	0.8740	5.79	0.64
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
STATION=WILKESPORT LOVOL SITE NO.1

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	20.94	9.00	0.225	1.151	1.433	0.741	0.105
MINIMUM	6.72	0.59	0.042	0.222	0.000	0.282	0.000
ARITH. MEAN	11.37	3.15	0.118	0.665	0.454	0.538	0.046
ARITH. STD. DEV	3.86	2.47	0.053	0.297	0.436	0.136	0.031
GEOM. MEAN	10.84	2.25	0.107	0.595	0.339	0.520	0.049
1ST QUARTILE	8.36	0.82	0.078	0.438	0.047	0.435	0.023
2ND QUARTILE	10.76	3.02	0.108	0.630	0.502	0.585	0.052
3RD QUARTILE	13.56	4.60	0.162	0.910	0.662	0.646	0.064
MISSING VALUES	0	0	0	0	0	0	0

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.220	0.354	0.322	0.531	0.046	0.0156	0.004
MINIMUM	0.070	0.013	0.000	0.000	0.000	0.0000	0.000
ARITH. MEAN	0.162	0.129	0.107	0.117	0.010	0.0068	0.003
ARITH. STD. DEV	0.040	0.096	0.110	0.172	0.013	0.0051	0.001
GEOM. MEAN	0.156	0.091	0.066	0.060	0.005	0.0053	0.003
1ST QUARTILE	0.143	0.038	0.017	0.018	0.001	0.0012	0.002
2ND QUARTILE	0.165	0.149	0.076	0.058	0.005	0.0074	0.003
3RD QUARTILE	0.189	0.180	0.165	0.107	0.014	0.0107	0.003
MISSING VALUES	0	0	0	0	1	0	0

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	13	13	13	13	13	13.00	13.00
MAXIMUM	0.09583	0.0057	0.0447	0.01269	1.9313	11.04	1.30
MINIMUM	0.00000	0.0000	0.0006	0.00000	0.5781	3.56	0.26
ARITH. MEAN	0.00981	0.0018	0.0231	0.00382	1.0047	6.73	0.78
ARITH. STD. DEV	0.02591	0.0019	0.0145	0.00468	0.3767	2.18	0.31
GEOM. MEAN	0.00316	0.0015	0.0156	0.00175	0.9471	6.40	0.72
1ST QUARTILE	0.00114	0.0001	0.0080	0.00039	0.7038	4.74	0.52
2ND QUARTILE	0.00258	0.0012	0.0254	0.00123	1.0074	7.04	0.78
3RD QUARTILE	0.00515	0.0030	0.0345	0.00815	1.2376	8.19	1.01
MISSING VALUES	0	0	0	0	0	0.00	0.00

PART IV

SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION
REGION=CE

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	35	35	35	35	35	35	35
MAXIMUM	46.20	41.25	1.699	4.246	7.886	4.853	0.152
MINIMUM	0.00	0.24	0.006	0.013	0.000	0.000	0.000
ARITH. MEAN	6.16	3.91	0.166	0.447	0.499	0.417	0.048
ARITH. STD. DEV	7.88	6.83	0.285	0.720	1.345	0.823	0.032
GEOM. MEAN	4.51	2.59	0.100	0.228	0.253	0.321	0.044
1ST QUARTILE	2.45	2.11	0.066	0.163	0.101	0.165	0.026
2ND QUARTILE	4.13	2.64	0.100	0.270	0.230	0.258	0.040
3RD QUARTILE	7.93	3.26	0.175	0.589	0.452	0.444	0.060
MISSING VALUES	2	2	2	2	2	2	2

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	35	35	35	35	35	35	35
MAXIMUM	2.275	2.062	1.092	0.789	0.249	0.0849	0.042
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.0001	0.000
ARITH. MEAN	0.234	0.139	0.103	0.077	0.015	0.0077	0.004
ARITH. STD. DEV	0.383	0.353	0.193	0.149	0.046	0.0143	0.007
GEOM. MEAN	0.151	0.080	0.058	0.049	0.006	0.0046	0.002
1ST QUARTILE	0.085	0.036	0.037	0.000	0.003	0.0029	0.002
2ND QUARTILE	0.132	0.060	0.048	0.027	0.006	0.0047	0.002
3RD QUARTILE	0.288	0.117	0.070	0.074	0.011	0.0075	0.003
MISSING VALUES	2	2	2	2	7	2	2

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	35	35	35	35	35	35.00	35.00
MAXIMUM	0.01213	0.0061	0.2396	0.01464	12.4355	36.85	5.94
MINIMUM	0.00000	0.0000	0.0010	0.00000	0.1902	0.08	0.06
ARITH. MEAN	0.00230	0.0010	0.0236	0.00503	1.0772	4.38	0.61
ARITH. STD. DEV	0.00248	0.0011	0.0399	0.00487	2.0576	6.10	0.98
GEOM. MEAN	0.00189	0.0008	0.0152	0.00207	0.7297	2.98	0.42
1ST QUARTILE	0.00075	0.0005	0.0099	0.00031	0.5571	2.09	0.26
2ND QUARTILE	0.00175	0.0008	0.0147	0.00373	0.7443	3.11	0.40
3RD QUARTILE	0.00262	0.0011	0.0240	0.00915	0.8577	4.76	0.67
MISSING VALUES	2	2	2	2	2	2.00	2.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION

REGION=NE

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	88	88	88	88	88	88	88
MAXIMUM	13.49	5.19	0.213	0.413	2.013	0.639	0.087
MINIMUM	0.22	0.19	0.000	0.000	0.000	0.073	0.004
ARITH. MEAN	3.85	2.06	0.072	0.146	0.144	0.236	0.033
ARITH. STD. DEV	3.15	0.93	0.049	0.096	0.244	0.115	0.018
GEOM. MEAN	2.67	1.84	0.055	0.114	0.110	0.212	0.028
1ST QUARTILE	1.48	1.46	0.030	0.068	0.027	0.148	0.021
2ND QUARTILE	2.80	1.95	0.066	0.121	0.074	0.206	0.029
3RD QUARTILE	5.79	2.56	0.106	0.219	0.164	0.288	0.049
MISSING VALUES	1	1	1	1	1	1	1

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	88	88	88	88	88	88	88
MAXIMUM	0.868	1.450	0.645	0.501	0.062	0.0247	0.024
MINIMUM	0.039	0.000	0.007	0.000	0.000	0.0000	0.001
ARITH. MEAN	0.169	0.112	0.106	0.092	0.005	0.0047	0.003
ARITH. STD. DEV	0.109	0.189	0.129	0.122	0.008	0.0041	0.003
GEOM. MEAN	0.145	0.078	0.063	0.069	0.004	0.0037	0.003
1ST QUARTILE	0.091	0.029	0.030	0.018	0.001	0.0023	0.002
2ND QUARTILE	0.149	0.059	0.058	0.042	0.004	0.0035	0.003
3RD QUARTILE	0.214	0.126	0.126	0.098	0.008	0.0054	0.004
MISSING VALUES	1	1	1	1	8	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	88	88	88	88	88	88.00	88.00
MAXIMUM	0.00908	0.0029	0.0335	0.02098	2.1272	7.71	0.59
MINIMUM	0.00000	0.0000	0.0000	0.00000	0.0926	0.25	0.02
ARITH. MEAN	0.00199	0.0005	0.0099	0.00361	0.6259	2.61	0.22
ARITH. STD. DEV	0.00187	0.0005	0.0065	0.00498	0.3009	1.70	0.14
GEOM. MEAN	0.00151	0.0005	0.0082	0.00131	0.5611	2.07	0.17
1ST QUARTILE	0.00061	0.0001	0.0057	0.00027	0.4603	1.32	0.10
2ND QUARTILE	0.00131	0.0004	0.0093	0.00108	0.5858	2.31	0.20
3RD QUARTILE	0.00340	0.0008	0.0125	0.00544	0.7978	3.48	0.30
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION

REGION=NW

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	61	61	61	61	61	61	61
MAXIMUM	2.56	2.71	0.230	1.020	0.875	0.418	0.182
MINIMUM	0.00	0.04	0.000	0.000	0.000	0.081	0.000
ARITH. MEAN	0.89	0.97	0.039	0.110	0.152	0.180	0.025
ARITH. STD. DEV	0.57	0.47	0.035	0.177	0.193	0.078	0.028
GEOM. MEAN	0.77	0.82	0.031	0.070	0.111	0.165	0.020
1ST QUARTILE	0.44	0.65	0.020	0.039	0.024	0.122	0.012
2ND QUARTILE	0.71	0.97	0.030	0.068	0.071	0.166	0.018
3RD QUARTILE	1.36	1.31	0.045	0.105	0.216	0.212	0.030
MISSING VALUES	3	2	1	0	2	3	2

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	61	61	61	61	61	61	61
MAXIMUM	0.391	0.528	0.600	0.661	0.011	0.0153	0.018
MINIMUM	0.051	0.000	0.000	0.000	0.000	0.0000	0.000
ARITH. MEAN	0.147	0.074	0.085	0.060	0.003	0.0029	0.002
ARITH. STD. DEV	0.070	0.096	0.121	0.108	0.003	0.0026	0.004
GEOM. MEAN	0.133	0.050	0.044	0.039	0.002	0.0024	0.002
1ST QUARTILE	0.094	0.022	0.016	0.005	0.001	0.0012	0.001
2ND QUARTILE	0.131	0.039	0.039	0.025	0.002	0.0022	0.001
3RD QUARTILE	0.178	0.086	0.094	0.058	0.004	0.0037	0.003
MISSING VALUES	2	2	2	2	7	2	2

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	61	61	61	61	61	61.00	61.00
MAXIMUM	0.02580	0.0026	0.0646	0.02396	1.2818	1.45	1.09
MINIMUM	0.00000	0.0000	0.0000	0.00011	0.0000	0.12	0.02
ARITH. MEAN	0.00320	0.0005	0.0058	0.00571	0.4183	0.77	0.15
ARITH. STD. DEV	0.00401	0.0005	0.0096	0.00572	0.2701	0.34	0.20
GEOM. MEAN	0.00222	0.0005	0.0040	0.00233	0.3671	0.68	0.10
1ST QUARTILE	0.00056	0.0002	0.0009	0.00044	0.2523	0.50	0.06
2ND QUARTILE	0.00209	0.0003	0.0038	0.00399	0.3506	0.75	0.10
3RD QUARTILE	0.00470	0.0009	0.0065	0.00900	0.5029	1.04	0.16
MISSING VALUES	2	2	2	2	3	3.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION

REGION=SE

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	42	42	42	42	42	42	42
MAXIMUM	19.63	13.73	0.393	1.636	7.935	7.853	3.599
MINIMUM	1.24	0.28	0.052	0.029	0.000	0.164	0.018
ARITH. MEAN	5.58	4.33	0.118	0.431	0.733	0.622	0.325
ARITH. STD. DEV	3.84	2.44	0.066	0.282	1.267	1.193	0.810
GEOM. MEAN	4.65	3.73	0.105	0.353	0.434	0.403	0.109
1ST QUARTILE	3.05	2.89	0.079	0.255	0.185	0.269	0.060
2ND QUARTILE	4.44	3.58	0.099	0.382	0.363	0.338	0.092
3RD QUARTILE	6.81	5.31	0.150	0.579	0.858	0.512	0.133
MISSING VALUES	1	1	1	1	1	1	4

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	42	42	42	42	42	42	42
MAXIMUM	5.726	1.111	1.032	0.820	0.044	0.0656	0.009
MINIMUM	0.094	0.000	0.020	0.000	0.000	0.0042	0.000
ARITH. MEAN	0.482	0.161	0.127	0.214	0.009	0.0144	0.003
ARITH. STD. DEV	0.999	0.175	0.161	0.197	0.007	0.0133	0.002
GEOM. MEAN	0.257	0.130	0.090	0.160	0.008	0.0109	0.003
1ST QUARTILE	0.128	0.073	0.054	0.066	0.005	0.0059	0.002
2ND QUARTILE	0.238	0.120	0.087	0.171	0.008	0.0092	0.003
3RD QUARTILE	0.388	0.198	0.154	0.259	0.012	0.0156	0.004
MISSING VALUES	1	1	1	1	1	1	1

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	42	42	42	42	42	42.00	42.00
MAXIMUM	0.02681	0.0071	0.0720	0.85079	13.7435	12.43	2.03
MINIMUM	0.00094	0.0000	0.0088	0.00060	0.0579	1.65	0.08
ARITH. MEAN	0.00328	0.0016	0.0234	0.02850	1.2158	4.23	0.55
ARITH. STD. DEV	0.00550	0.0013	0.0129	0.13179	2.1198	2.10	0.32
GEOM. MEAN	0.00206	0.0013	0.0209	0.00727	0.8241	3.86	0.48
1ST QUARTILE	0.00130	0.0008	0.0153	0.00477	0.6095	3.01	0.35
2ND QUARTILE	0.00160	0.0012	0.0217	0.00717	0.7900	3.70	0.48
3RD QUARTILE	0.00301	0.0018	0.0272	0.00922	0.9594	4.48	0.71
MISSING VALUES	1	1	1	1	1	1.00	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY
SUMMARY STATISTICS OF CONCENTRATION

REGION=SW

	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3
# OF SAMPLES	65	65	65	65	65	65	65
MAXIMUM	20.94	11.71	0.421	1.473	5.849	1.038	0.143
MINIMUM	0.07	0.00	0.000	0.013	0.000	0.070	0.000
ARITH. MEAN	8.44	3.72	0.136	0.703	0.712	0.463	0.051
ARITH. STD. DEV	4.66	2.50	0.075	0.332	1.092	0.200	0.035
GEOM. MEAN	6.49	2.82	0.115	0.588	0.398	0.414	0.041
1ST QUARTILE	4.36	1.96	0.087	0.473	0.167	0.311	0.023
2ND QUARTILE	8.09	3.45	0.122	0.719	0.364	0.447	0.050
3RD QUARTILE	11.93	4.90	0.183	0.934	0.648	0.613	0.072
MISSING VALUES	2	2	2	2	2	3	2

	SODIUM UG/M3	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3
# OF SAMPLES	65	65	65	65	65	65	65
MAXIMUM	0.328	2.360	1.030	1.138	0.046	0.0369	0.013
MINIMUM	0.044	0.000	0.000	0.000	0.000	0.0000	0.000
ARITH. MEAN	0.156	0.203	0.142	0.153	0.010	0.0094	0.003
ARITH. STD. DEV	0.063	0.337	0.161	0.222	0.010	0.0075	0.002
GEOM. MEAN	0.144	0.115	0.086	0.085	0.007	0.0067	0.003
1ST QUARTILE	0.111	0.065	0.045	0.027	0.003	0.0041	0.002
2ND QUARTILE	0.150	0.123	0.094	0.070	0.006	0.0074	0.003
3RD QUARTILE	0.188	0.197	0.212	0.167	0.015	0.0136	0.004
MISSING VALUES	2	2	2	2	7	2	2

	NICKEL UG/M3	VANADIUM UG/M3	ZINC UG/M3	CADMIUM UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M**3	TOTAL N NITRATE UG/M**3
# OF SAMPLES	65	65	65	65	65	65.00	65.00
MAXIMUM	0.09583	0.0075	0.0877	0.02136	1.9313	11.04	1.62
MINIMUM	0.00000	0.0000	0.0006	0.00000	0.0000	0.04	0.02
ARITH. MEAN	0.00418	0.0016	0.0267	0.00456	0.9449	5.46	0.84
ARITH. STD. DEV	0.01192	0.0017	0.0190	0.00524	0.4035	2.54	0.36
GEOM. MEAN	0.00221	0.0013	0.0187	0.00199	0.8820	4.38	0.72
1ST QUARTILE	0.00129	0.0007	0.0136	0.00058	0.6675	3.31	0.60
2ND QUARTILE	0.00202	0.0013	0.0228	0.00208	0.8552	5.40	0.85
3RD QUARTILE	0.00407	0.0018	0.0350	0.00814	1.1088	7.66	1.12
MISSING VALUES	2	2	2	2	2	2.00	2.00

^Z